

Chemische Beständigkeit

Silikon, Viton®, EPDM und Teflon® / PTFE

Chemische Beständigkeitsliste | Printed 2005 | Herausgegeben durch: Connectors Verbindungstechnik AG, Ringstrasse 24, CH-8317 Tagelswangen | Allfällige Änderungen vorbehalten

Elastomere / Materialien: Silikon, Viton®, EPDM und Teflon® / PTFE

Den folgenden Angaben liegen Prüfungen bei unterschiedlichen Bedingungen zugrunde. Vielfach sind die Werte bei Raumtemperatur und 7 Tagen (150 Stunden) Einwirkungszeit ermittelt worden. In Einzelfällen sind Abweichungen (Labor - Praxis) durchaus möglich. Aufgrund der unterschiedlichen Einsatzparameter und den verschiedenen Zusammensetzungen der Medien sind diese Angaben nur Richtwerte. Alle Angaben sind unverbindlich und ohne Gewähr womit wir deshalb keine Gewährleistung für die Richtigkeit unserer Empfehlungen im Einzelfall übernehmen. Sollten Sie aussergewöhnliche Betriebsbedingungen haben, bitten wir Sie um Rücksprache.

Ratings - chemical effect

A - No effect - Excellent

B- Minor effect - Good

C - Moderate effect - Fair

D - Severe effect - Not recommended

Explanation of footnotes

1. Satisfactory to 72°F = 22° C

2. Satisfactory to 120°F = 50°C

Viton® is a registered trademark of DuPont Dow Elastomers

Teflon® is a registered trademark of DuPont Dow Elastomers



Chemicals	Silicone	Viton®	EPDM	Teflon® / PTFE
A				
ACETALDEHYDE	A	D	A	A
ACETAMIDE	B	B	A	A
ACETATE SOLVENT	C	D	A	A
ACETIC ACID, GALACIAL	B	D	B	A
ACETIC ACID 20%	B	B	A	A
ACETIC ACID 80%	B	B	A	A
ACETIC ACID	C	B	A	A
ACETIC ANHYDRIDE	C	D	B	A
ACETONE	B	D	A	A
ACETYL CHLORIDE (DRY)	C	A	D	A
ACETYLENE	B	A	A	A
ACRYLONITERILE	D	D	D	A
ALCOHOLS:	D	D	D	A
AMYL	D	B	A	A
BENZYL	-	A	B	A
BUTYL	B	A	B	A
DIACETONE	D	D	A	A
ETHYL	B	A	A	A
HEXYL	B	C	C	A
ISOBUTYL	A	A	A	A2
ISOPROPYL	A	A	A	A2
METHYL	A	B2	A	A
OCTYL	B	B	A	-
PROPYL	A	A	A	A
ALUMINIUM CHLORIDE 20%	B	A	A	A
ALUMINIUM CHLORIDE	B	A	A	A
ALUMINIUM FLUORIDE	B	A	A	A
ALUMINIUM HYDROXIDE	-	A	A	A
ALUMINIUM POTASSIUM SULFATE 10%	A	A	A	A
ALUMINIUM POTASSIUM SULFATE 100%	A	A	A	A
ALUMINIUM SULFATE	A	A	A	A
AMINES	B	D	B	A2
AMMONIA 10%	-	D	A	A
AMMONIA ANHYDROUS	D	D	A	A
AMMONIA, LIQUID	-	D	A	A
AMMONIA NITRATE	-	D	A	A
AMMONIUM BIFLUORIDE	-	A	A2	A
AMMONIUM CARBONATE	-	-	A	A
AMMONIUM CASENITE	-	-	-	-
AMMONIUM CHLORIDE	A	A	A	A
AMMONIUM HYDROXIDE	-	B	A	A
AMMONIUM NITRATE	-	A	A	A
AMMONIUM OXALATE	-	-	-	-
AMMONIUM PERSULFATE	A	A	A	A1
AMMONIUM PHOSPHATE, DIBASIC	A	A	A	A2
AMMONIUM PHOSPHATE, MONOBASIC	A	A	A	A
AMMONIUM PHOSPHATE, TRIBASIC	A	A	A	A
AMMONIUM SULFATE	-	A	A	A
AMMONIUM THIOSULFATE	D	-	-	-
AMYL ACETATE	D	D	A	A
AMYL ALCOHOL	D	B	A	A
AMYL CHLORIDE	D	B1	D	A
ANILINE	D	C	B	A
ANTI FREEZE	-	A	-	-
ANTIMONY TRICHLORIDE	-	A2	B1	A
AQUA REGIA (80% hci, 20% HNO3)	D	B	C	A
AROCHLOR 1248	B	A	B	A
AROMATIC HYDROCARBONS	D	A	D	-
ARSENIC ACID	A	A2	A2	A
ASPHALT	D	A	D	A1

B	Silicone	Viton®	EPDM	Teflon® / PTFE
BARIUM CARBONATE	-	A	A	A
BARIUM CHLORIDE	A	A	A	A
BARIUM CYANIDE	-	A	A	A1
BARIUM HYDROXIDE	A	A	A	A
BARIUM NITRATE	-	A	A	A1
BARIUM SULFATE	A	A	A	A
BARIUM SULFIDE	A	A	A	A
BEER	A	A	A	A
BEET SUGAR LIQUIDS	A	A	A	A1
BEZALDEHYDE	D	D	A	A1
BENZENE	D	A	D	A
BENZOIC ACID	B	A	D	A2
BENZOL	-	A	B	A
BORAX (SODIUM BORATE)	B	A	A	A
BORIC ACID	A	A	A	A
BREWERY SLOP	-	A	-	-
BROMINE	D	A	D	A
BUTADIENE	D	B	C	A2
BUTANE	D	A	D	A
BUTANOL (BUTYL ALCOHOL 9	B	A	B	A2
BUTTER	B	A	A	A
BUTTERMILK	-	A	-	A
BUTYLENE	D	A	D	A
BUTYLACETATE	D	D	B	A
BUTYRIC ACID	-	B1	B	A2

C	Silicone	Viton®	EPDM	Teflon® / PTFE
CALCIUM BISULFATE	-	-	-	-
CALCIUM BISULFIDE	-	A	C	A
CALCIUM BISULFITE	A	A	D	A
CALCIUM CARBONATE	A	A	A	A
CALCIUM CHLORATE	-	A	A	A
CALCIUM CHLORIDE	A	A	A	A
CALCIUM HYDROXIDE	A	A	A	A
CALCIUM HYPOCHLORIDE	B	A	B1	A
CALCIUM SULFATE	-	A	A	A
CALGON	-	A	A	-
CANE JUICE	A	A	A	A
CARBOLIC ACID 8 SEE PHENOL 9	D	A	B	A
CARBON BISULFIDE	-	A	D	-
CARBON DIOXIDE	B	B	B	A
CARBON DIOXIDE (DRY)	B	B	B	A
CARBON DIOXIDE (WET)	B	B	B	A
CARBON DISULFIDE	-	A1	D	A
CARBON MONOXIDE	A	A	A	A
CARBON TETRACHLORIDE	D	A	D	A
CARBONATED WATER	-	A	-	-
CARBONIC ACID	A	A	A	A
CATSUP	-	A	C	-
CHLOROACETIC ACID	-	D	B	A
CHLORIC ACID	-	-	-	A
CHLORINATED GLUE	-	A	B	-
CHLORINE, ANHYDROUS LIQUID	-	A	C	A
CHLORINE, DRY	D	A	A	A
CHLORINE WATER	-	A	C	A
CHLORO BENZENE (MONO)	D	A	D	B
CHLOROFORM	D	A	D	A1
CHLOROSULFONIC ACID	D	C	D	A
CHOCOLATE SYRUP	-	A	-	A
CHROMIC ACID 5%	C	A	A	A
CHROMIC ACID 10%	C	B	C	A
CHROMIC ACID 30%	C	A	B	A
CHROMIC ACID 50%	C	A	B	A2
CIDER	-	A	-	-

CITRIC ACID	A	A	A	A
CITRIC OILS	-	A	-	-
CLOROX (BLEACH)	-	A	B	A
COFFEE	A	A	A	-
COPER CHLORIDE	A	A	A	A
COPPER CYANIDE	A	A	A	A
COPPER NITRATE	-	A	-	A
COPPER SULFATE 5%	A	A	A	A
COPPER SULFATE > 5%	A	A	A	A
CREAM	-	A	-	A
CRESOLS	D	D	D	-
CRESYLIC ASID	D	D	D	A
CYANIC ACID	-	A	-	A
CYCLOHEXANE	D	A	D	A

D	Silicone	Viton®	EPDM	Teflon® / PTFE
DETERGENTS	A	A	A	A
DICHLORETHANE	-	C	-	A1
DIESEL FUEL	D	A	D	A
DIETHYLAMINE	B	D	B	A
DIETHYLENE GLYCOL	B	A	A	A2
DIPHENYL OXIDE	C	A	D	A1
DYES	-	A	-	-

E	Silicone	Viton®	EPDM	Teflon® / PTFE
EPSOM SALTS (MAGNESIUM SULFATE)	A	A	A	A
ETHANE	D	A	D	A
ETHANOLAMINE	B	D	B	A
ETHER	D	C	C	A
ETHYL ACETETE	B	D	B	A
ETHYL CHLORIDE	D	A	A	A
ETHYL SULFATE	-	A	-	A
ETHYLENE CHLORIDE	D	B	D	A
ETHYLENE DICHLORIDE	D	A	C	A
ETHYLENE GLYCOL	A	A	A	A
ETHYLENE OXYDE	D	D	C	A

F	Silicone	Viton®	EPDM	Teflon® / PTFE
FATTY ACIDS				
FERRIC CHLORIDE	B	A	A	A
FERRIC NITRATE	C	A	A	A
FERRIC SULFATE	B	A	A	A
FERROUS CHLORIDE	-	A	-	A
FERROUS SULFATE	-	-	A	A
FLUOBORIC ACID	-	-	A2	A
FLUORINE	D	B	A1	A
FLUORSILICIC ACID	-	--	A2	A
FORMALDEHYDE 40%	-	A	A	A
FORMALDEHYDE 100%	B	D	A	A
FORMIC ACID	B	C	A	A
FREON 11	D	A	D	C
FREON 12	D	B	B	A
FREON 22	D	D	A	A
FREON 113	D	B	D	A
FREON TF	D	B	D	D
FRUIT JUICE	-	A	-	A
FUEL OILS	C	A	D	A
FURAN RESIN	D	-	C	A
FURFURAL	D	D	B	A

G	Silicone	Viton®	EPDM	Teflon® / PTFE
GALLIC ACID	-	A	B	A
GASOLINE	D	A	D	A
GELATIN	A	A	A	A
GLUCOSE	A	A	A	A
GLUE P.V.A.	A	A	A	A

GLYCERIN	A	A	A	A
GLYCOLIC ACID	A	A	A	A
GOLD MONOCYANIDE	-	A	-	D
GRAPE JUICE	-	A	-	D
GREASE	-	A	-	A

H	Silicone	Viton®	EPDM	Teflon® / PTFE
HEPTAN	D	A	D	A
HEXANE	D	A	D	A
HONY	-	A	-	A
HYDRAULIC OIL (PETRO)	C	A	D	A
HYDRAULIC OIL (SYNTHETIC)	-	A	-	A
HYDRAZINE	C	A	A	C
HYDROBROMIC ACID 20%	D	A	A	-
HYDROBROMIC ACID 100%	D	A	A	A
HYDROCHLORIC ACID, DRY GAS	-	-	-	A
HYDROCHLORIC ACID 20%	-	A	-	A
HYDROCHLORIC ACID 37%	B	A	A	A
HYDROCHLORIC ACID 100%	D	A	C	A
HYDROCYANIC ACID	-	A	A	A
HYDROCYANIC ACID (GAS 10%)	-	A	A	A
HYDROFLUORIC ACID 20%	D	A1	A1	A
HYDROFLUORIC ACID 50%	D	A1	A1	A
HYDROFLUORIC ACID 75%	D	A1	C	A
HYDROFLUORIC ACID 100%	D	A1	C	A
HYDROFLUOSILICIC ACID 20%	-	A	A	A
HYDROFLUOSILICIC ACID 100%	D	A	A	A
HYDROGEN GAS	C	A	A	A
HYDROGEN PEROXIDE 10%	B	A	-	A
HYDROGEN PEROXIDE 30%	B	A	-	A
HYDROGEN PEROXIDE 50%	B	A	-	A
HYDROGEN PEROXIDE 100%	B	A	A	A
HYDROGEN SULFIDE (AQUA)	C	D	A	A
HYDROGEN SULFIDE (DRY)	C	D	A	A
HYDROXYACETIC ACID 70%	-	A	A	-

I	Silicone	Viton®	EPDM	Teflon® / PTFE
INK	-	A	-	D
IODINE	-	A	B	A
IODINE (IN ALCOHOL)	-	-	-	-
IODIFORM	-	-	A	C
ISOTANE	-	A	-	-
ISOPROPYL ACETATE	D	D	B	A
ISOPROPYL ETHER	D	D	D	A1

J	Silicone	Viton®	EPDM	Teflon® / PTFE
JET FUEL (JP3, -4, -5)	D	A	D	A

K	Silicone	Viton®	EPDM	Teflon® / PTFE
KEROSINE	D	A	D	A
KETONES	-	D	D	A

L	Silicone	Viton®	EPDM	Teflon® / PTFE
LACQUERS	D	D	D	A
LACQUERS THINNERS	D	D	D	A
LACTIC ACID	A	A	A	A
LARD	B	A	D	A
LATEX	-	A	A	A
LEAD ACETATE	D	D	A	A
LEAD SULFAMATE	B	A	A	A1
LIGROIN	D	A	D	-
LIME	-	A	D	A1
LUBRICANTS	D	A	D	A

M	Silicone	Viton®	EPDM	Teflon® / PTFE
MAGNESIUM CARBONATE	-	A	A	A1
MAGNESIUM CHLORIDE	A	A	A	A

MAGNESIUM HYDROXIDE	A	A	A	A
MAGNESIUM NITRATE		A	A	A
MAGNESIUM OXIDE	-	C	-	-
MAGNESIUM SULFATE	A	A	A	A
MALEIC ACID	-	A	D	A
MALEIC ANHYDRIDE	-	A	D	-
MALIC ACID	B	A	D	A
MASH	-	A	A	-
MAIONNAISE	-	A	-	D
MELAMINE	-	A	A	A
MERCURIC CHLORIDE (DILUTE)	-	A	A	A
MERCURIC CYANIDE	-	A	-	A
MERCURY	-	A	A	A
METHANOL (METHYL ALCOHOL)	A	A	A	A
METHYL ACETATE	D	D	B	A
METHYL ACRYLATE	D	D	B	-
METHYL ACETONE	-	A	-	A
METHYL ALCOHOL 10%	A	D	A	A
METHYL BROMIDE	-	A	D	A
METHYL BUTYL KETONE	D	D	A	-
METHYL CELLOSOLVE	D	D	A	A
METHYL CHLORIDE	D	A	C	A
METHYL DICHLORIDE	-	A	D	-
METHYL ETHYL KETONE	D	D	D	A
METHYL ISOBUTYL KETONE	D	D	C	A
METHYL ISOPROPYL KETONE	D	D	B	-
METHYL METHACRYLATE	C	D	D	-
METHYLAMIN	-	D	A1	A
MILK	A	A	A	A
MOLASSES	-	A	-	A
MUSTARD	-	D	-	A

N	Silicone	Viton®	EPDM	Teflon® / PTFE
NAPHTA	D	A	D	A
NAPHTHALENE	D	A	D	A
NICKEL CHLORIDE	A	A	A	A
NICKEL SULFATE	A	A	A	A
NITRATING ACIDE (< 15% H2SO4)	-	-	-	A
NITRATING ACIDE (< 1% ACID)	-	-	-	A
NITRATING ACIDE (< 15% HNO3)	-	-	-	A
NITRIC ACID (5-10%)	C	A	B	A
NITRIC ACID (20%)	D	A	B	A
NITRIC ACID (50%)	D	A	D	A
NITRIC ACID (CONCENTRATED)	D	A	D	A
NITROUS ACID	-	A	A	A
NITROBENZENE	D	B	D	A

O	Silicone	Viton®	EPDM	Teflon® / PTFE
OILS				
ANILINE	D	C	B	A
ANISE	-	-	-	-
BAY	-	A	-	-
BONE	-	A	-	-
CASTOR	A	A	B	A
CINNAMON	-	A	-	-
CITRIC	-	A	-	D
CLOVE	-	A	-	-
COCOA NUT	A	A	C	A
CODE LIVER	B	A	A	A
CORN	A	A	C	A
COTTON SEED	A	A	C	A
CREOSOTE	D	A	D	A
DIESEL FUEL (20, 30, 40, 50)	D	A	D	A
FUEL (1, 2, 3, 5A, 5B, 6)	C	A	D	A
GINGER	-	A	A	-
LEMON	-	A	D	A

LINSEED	A	A	C	A
MINERAL	C	A	D	A
OLIVE	D	A	B	A1
ORANGE	D	A	-	-
PALM	-	A	-	-
PEANUT	A	A	C	A
PEPERMINT	-	A	-	-
PINE	D	A	D	A
RAPPESEED	D	A	A	-
ROSIN	-	A	-	A
SESAM SEED	-	A	-	A
SILICONE	C	A	A	A
SOYBEAN	A	A	C	A
SPERM	-	A	-	-
TANNING	-	A	-	-
TURBINE	D	A	D	A
OLEIC ACID	D	B	B	A
OLEUM 25%	D	A	D	A
OLEUM 100%	D	A	D	A
OXALIC ACID (COLD)	B	A	A	A1

P	Silicone	Viton®	EPDM	Teflon® / PTFE
PARAFIN	-	B	D	A
PENTANE	D	A	D	A
PERCHLORETHYLENE	D	A	D	A
PETROLATUM	-	A	A	C
PHENOL (10%)	D	A	B	A
PHENOL (CARBOLIC ACID)	D	A	B	A
PHOSPHORIC ACID (< 40%)	D	A	B	A
PHOSPHORIC ACID (> 40%)	C	A	B	A
PHOSPHORIC ACID (CRUDE)	C	A	B	A
PHOSPHORIC ACID ANHYDRIDE	-	A	B	-
PHOSPHORIC ACID (MOLTEN)	-	-	-	-
PHOTOGRAPHIC DEVELOPER	A	A	B	A
PHOTHALIC ANHYDRIDE	-	A	A	A
PICRIC ACID	D	A	B	A
POTASH	-	A	-	-
POTASSIUM BICARBONATE	-	A	-	A
POTASSIUM BROMIDE	-	A	A	A
POTASSIUM CHLORATE	-	A	A	A
POTASSIUM CHLORIDE	A	A	A	A
POTASSIUM CHROMATE	-	A	A	A
POTASSIUM CYANIDE SOLUTIOS	A	A	A	A1
POTASSIUM DICHROMATE	A	A	A	A
POTASSIUM FERROCYANIDE	-	A	A	A
POTASSIUM HYDROXIDE (CLAUSTIC POTASH)	C	B	A	A
POTASSIUM NITRATE	A	A	A	A
POTASSIUM PERMANGANATE	-	A	A	A
POTASSIUM SULFATE	A	A	A	A
POTASSIUM SULFIDE	A	A	A	A
PROPANE (LIQUIFIED)	D	A	D	A
PROPYLEN CLYCOL	-	A	-	A
PYRIDINE	D	D	B	A
PYROGALLIC ACID	-	A	-	A

R	Silicone	Viton®	EPDM	Teflon® / PTFE
ROSINS	-	-	-	A
RUM	-	A	-	-
RUST INHIBITORS	-	A	-	-

S	Silicone	Viton®	EPDM	Teflon® / PTFE
SALAD DRESSING	-	A	-	-
SEA WATER	A	A	A	A
SHELLAC (BLEACHED)	-	-	-	A
SHELLAC (ORANGE)	-	-	-	A
SILICONE	C	A	A	A

SILVER BROMIDE	-	-	-	A
SILVER NITRATE	A	A	A	A
SOAP SOLUTIONS	A	A	A	A
SODEA ASH (SEE SODIUM CARBONATE)				
SODIUM ACETATE	D	D	A	A
SODIUM ALUMINATE	-	A	A	A
SODIUM BICARBONATE	D	A	A	A
SODIUM BISULFATE	-	A	A	A
SODIUM BISULFITE	A	A	A	A
SODIUM BORATE	A	A	A	A
SODIUM CARBONATE	A	A	A	A
SODIUM CHLORATE	-	A	A	A
SODIUM CHLORIDE	A	A	A	A
SODIUM CHROMATE	-	A	-	A
SODIUM CYANIDE	A	A	A	A
SODIUM FLUORIDE	-	A	A	A1
SODIUM HYDROSULFITE	-	A	-	A
SODIUM HYDROXIDE (20%)	B	B	A	A
SODIUM HYDROXIDE (50%)	B	B	A	A
SODIUM HYDROXIDE (80%)	C	B	A	A1
SODIUM HYPOCHLORITE (<20%)	B	A	B	A
SODIUM HYPOCHLORITE (100%)	B	A	B	A
SODIUM HYPOSILFATE	-	-	-	A
SODIUM METAPHOSPHATE	-	A	A	A
SODIUM METASILICATE	-	A	A	A
SODIUM NITRATE	D	A	A	A
SODIUM PERBORATE	B	A	A	A
SODIUM PEROXIDE	D	A	A	A
SODIUM POLYPHOSPHATE	D	A	A	A
SODIUM SILICATE	-	A	A	A
SODIUM SULFATE	A	A	A	A
SODIUM SULFIDE	A	A	A	A
SODIUM SULFITE	A	A	A	A
SODIUM TETRABORATE	-	A	-	A
SODIUM THIOSULFATE (HYPO)	A	A	A	A
SORGHUM	-	A	-	-
SOY SAUCE	-	A	-	-
STANNIC CHLORIDE	B	A	B	A
STANNIC FLUOBORATE	-	A	-	-
STANNOUS CHLORIDE	B	A	A	A
STRACH	D	A	A	A
STEARIC ACID	-	A	B	A
STODDARD SOLVENT	D	A	D	A
STYRENE	D	B	D	A
SUGAR (LIQUIDS)	A	A	A	A
SULFATE (LIQUORS)	-	A	A	A
SULFUR CHLORIDE	C	A	D	A
SULFUR DIOXIDE	B	A	A	A
SULFUR DIOXIDE (DRY)	B	A	A	A
SULFUR TRIOXIDE (DRY)	D	A	B	A
SULFURIC ACID (< 10%)	D	A	B	A
SULFURIC ACID (< 10-75%)	D	A	B	A
SULFURIC ACID (< 75-100%)	D	A	B	A
SULFURIC ACID (HOT CONC)	D	A	D	A
SULFURIC ACID (COLD CONC)	D	A	B	A
SULFUROUS ACID	D	A	B	A
SULFURYL CHLORIDE	-	-	-	A

T	Silicone	Viton®	EPDM	Teflon® / PTFE
TALLOW	-	A	-	A
TANNIC ACID	B	A	A	A
TANNING LIQUORS	-	A	B	A
TARTARIC ACID	A	A	B	A
TETRACHLOROETHANE	-	A	-	A
TETRACHLOROETHYLENE	-	A	D	A

TETRAHYDROFURAN	-	D	B	A
TOLUENE (TOLUOL)	D	A	D	A
TOMATO JUICE	-	-	-	A
TRICHLOROETHANE	D	A	D	A
TRICHLOROETHYLENE	D	A	D	A
TRICHLOROPROPANE	-	A	-	A1
TRICRESYLPHOSPHATE	C	B	A	A
TRIETHLAMINE	-	A	-	A
TURPENTINGE	D	A	D	A

U	Silicone	Viton®	EPDM	Teflon® / PTFE
URINE	-	A1	A1	A1

V	Silicone	Viton®	EPDM	Teflon® / PTFE
VARNISH	D	A	D	A
VEGETABLE JUICE	-	A	-	-
VINEGAR	A	A	A	A

W	Silicone	Viton®	EPDM	Teflon® / PTFE
WATER, ACID, MINE	B	A	A	A
WATER, DISTILLED	-	A	A	A
WATER, FRESH	B	A	A	A
WATER, SALT	-	A	A	A
WEED KILLERS	-	A	-	-
WHEY	-	A	-	-
WHISKEY & WINES	A	A	A	A
WHITE LIQUOR (PULP MILL)	-	A	-	A
WHITE WATER (PAPER MILL)	-	A	-	-

X	Silicone	Viton®	EPDM	Teflon® / PTFE
XYLENE	D	A	D	A

Z	Silicone	Viton®	EPDM	Teflon® / PTFE
ZINC CHLORIDE	-	A	A	A
ZINC HYDROSULFIDE	-	-	A	-
ZINC SULFATE	A	A	A	A